



Gender and the associated impairments of childhood sexual abuse: A national study of Icelandic youth

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ABSTRACT

The current study used a national probability sample of 8618 Icelandic youth between the ages of 16 and 20 to examine the impairments associated with childhood sexual abuse for male and female victims. The dimensions of impairment were: general anxiety, eating anxiety, depressed mood, theft, and violent behavior. Overall, our results suggest that gender differences in impairment may depend on the particular outcome measured: (1) females were approximately three times more likely than males to experience childhood sexual abuse; (2) the association between childhood sexual abuse and subsequent depressed mood and general anxiety varied significantly by gender, with females more likely to experience these impairments; and (3) the associations between childhood sexual abuse and subsequent eating anxiety, theft, and violent behavior did not vary by gender.

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Introduction

Childhood sexual abuse is a persistent problem in the U.S and other western countries. Although males and females both experience sexual abuse as children, studies indicate that females are at greater risk (Chesney-Lind, 1986, 1989; Finkelhor & Baron, 1986; Martin, Bergen, Richardson, Roeger, & Allison, 2004; Ullman & Filipas, 2005). Estimates based on national samples from the U.S. and the U.K. indicate that between 4.9% and 21% of females experience sexual abuse prior to age 18, compared to between 2.5% and 11% of males (Ackard, Neumark-Sztainer, Hannan, French, & Story, 2001; Finkelhor, Ormrod, Turner, & Hamby, 2005; Hooper & Warwick, 2006). Studies also show that compared to males, females' sexual abuse starts younger and lasts longer (DeJong, Hervada, & Emmett, 1983; Finkelhor & Baron, 1986), involves more serious types of sexual behavior (Cutler & Nolen-Hoeksema, 1991), and is more likely to involve family members (Chesney-Lind, 1986; DeJong et al., 1983). While no one doubts that sexual abuse is harmful, experts disagree on the extent to which the consequences of sexual abuse are the same for both genders. Some experts argue that sexual abuse has a greater negative effect on females than males (Chesney-Lind, 1986, 1989; Cutler & Nolen-Hoeksema, 1991; Spohn, 2000; Ullman & Filipas, 2005), while others argue that the

consequences of sexual abuse are the same regardless of gender (Finkelhor, 1984).

These divergent perspectives have important implications for both theory and interventions. If the impairments associated with childhood sexual abuse (hereafter referred to as sexual abuse) are different for males and females then special (i.e., gendered) theories and interventions are needed to address them. If the impairments are the same, then universalistic (i.e., gender-blind) theories and interventions are needed. Few empirical studies address this fundamental issue. We take a step toward filling this gap by examining a range of impairments that may be associated with sexual abuse among a large, representative sample of Icelandic males and females between ages 16 and 20, gathered as part of the Icelandic Centre for Social Research and Analysis, 2004 Junior College Questionnaire. The sample is well-suited for this research since in addition to measuring the sexual abuse experiences of males and females, the study also measured a range of emotional and behavioral impairments that might result from such experiences. As far as we know, ours is the first study to examine the impairments associated with sexual abuse for both genders using a range of emotional and behavioral outcomes among a national sample of youth.

Impairments associated with childhood sexual abuse

A large and growing body of research indicates that sexual abuse has negative consequences for victims that can last far into

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adulthood. Studies of adolescent and adult survivors have found that those who are sexually abused as children exhibit greater *anxiety* (Boney-McCoy & Finkelhor, 1996; Hooper & Warwick, 2006; McCormack, Janus, & Burgess, 1986; Trickett & McBride-Chang, 1995; West & Litt, 1998), *fear* (Hooper & Warwick, 2006; Johnson, Rew, & Kouzekanani, 2006; McCormack et al., 1986), *self-derogation* (Dembo et al., 1987), *post-traumatic stress disorder symptoms* (Boney-McCoy & Finkelhor, 1996; Brown, Lourie, Zlotnic, & Cohn, 2000; Hooper & Warwick, 2006), *depression* (Boney-McCoy & Finkelhor, 1996; Gover, 2004; Hooper & Warwick, 2006; Johnson et al., 2006; Martin et al., 2004; Meyerson, Long, Miranda, & Marx, 2002; Schraedley, Gotlib, & Hayward, 1999; Turner, Finkelhor, & Ormrod, 2006; West & Litt, 1998), *emotional disorders* (Brown et al., 2000), *low self-esteem* (Brown et al., 2000; Johnson et al., 2006; Meyerson et al., 2002), *lack of trust* (Brown et al., 2000), *powerlessness* (Brown et al., 2000), *fear of rejection* (Brown et al., 2000), *anger* (Meyerson et al., 2002; Trickett & McBride-Chang, 1995; Turner et al., 2006), *disordered eating* (Ackard et al., 2001; Kendler et al., 2000; Neumark-Sztainer, Story, Hannan, Beuhring, & Resnick, 2000; West & Litt, 1998), *disturbed attachment* (Trickett & McBride-Chang, 1995), *dissociation* (Trickett & McBride-Chang, 1995), *general distress* (Meyerson et al., 2002), and *suicidality and other self-destructive or self-injurious behaviors* (Johnson et al., 2006; McCormack et al., 1986; Martin et al., 2004; Trickett & McBride-Chang, 1995).

In addition to these internalized forms of maladjustment, studies also link many externalizing behaviors to sexual abuse. Sexual abuse survivors exhibit higher rates of *inappropriate sexual behaviors or sexual confusion* (Brown et al., 2000; Johnson et al., 2006; McCormack et al., 1986; Trickett & McBride-Chang, 1995; West & Litt, 1998; Widom, 1989), *impulse-control problems* (Brown et al., 2000), and *disturbed peer relationships* (Trickett & McBride-Chang, 1995). Other externalizing behaviors include *delinquent or criminal activities* (Hooper & Warwick, 2006; McCormack et al., 1986; West & Litt, 1998; Widom, 1989), *substance abuse* (Brown et al., 2000; Dembo et al., 1987; Hooper & Warwick, 2006; Johnson et al., 2006; Kendler et al., 2000; Meyerson et al., 2002; Trickett & McBride-Chang, 1995), *school-related difficulties* (Boney-McCoy & Finkelhor, 1996), *physical disorders* (Brown et al., 2000), *running away* (Chesney-Lind, 1989; West & Litt, 1998), and *other forms of antisocial behavior* (Johnson et al., 2006; Trickett & McBride-Chang, 1995). Together, these studies support the conclusion that sexual abuse is associated with difficult adjustment problems for those who experience it. What remains unclear is the extent to which these adjustment problems are similar for both genders.

Theorizing the consequences of sexual abuse

In one of the few theories that address the question of *why* sexual abuse is associated with impairments later in life, Finkelhor (1995) outlines two main areas of theoretical concern: (1) identification of the emotional and behavioral maladjustments that result from the occurrence of sexual victimization at key developmental periods in childhood; and (2) identification of specific maladjustments that affect the likelihood of subsequent (or continued) victimization. The current study is concerned primarily with the former. Finkelhor's (1995) ideas regarding emotional and behavioral reactions to sexual abuse are grounded in the notion that key developmental stages, starting in infancy, mark the healthy development of children and adolescents; and that a breakdown in the process of development may occur as a result of sexual abuse. Finkelhor argues that how children react to victimization depends on their developmental stage at the time of victimization and on their level of cognitive ability, which affects how the child appraises

the victimization. Thus, Finkelhor provides a framework for linking sexual abuse to future emotional and behavioral impairments. Because sexual abuse upsets the process of development, sexually abused children are at risk of exhibiting a range of negative outcomes depending on the developmental stage during which victimization occurs.

Gender and the consequences of sexual abuse

While Finkelhor's (1995) developmental perspective does not focus specifically on gender, he does provide a brief discussion of the issue. Finkelhor notes that differences in the rate of sexual maturation of males and females may expose them to different risks for sexual abuse; sexual maturation, he argues, makes girls especially vulnerable to sexual violations. In addition to sexual maturation, Finkelhor argues that developmental factors may differentially affect boys' and girls' risk for sexual victimization. One key factor is age; gender differences in sexual maturation become more pronounced as children age. Whereas during childhood young boys and girls are fairly similar in appearance and activities, this changes greatly during adolescence, resulting in differential exposure to risk.

Another key factor – emphasized by feminist scholars – is gender differences in socialization, which can impact children's reactions to trauma and stress, such as sexual abuse. Slater, Guthrie, and Boyd (2001) provide a review of feminist perspectives in which they argue that gender socialization shapes development in ways that influence children's and adolescents' reactions to sexual abuse. Coping with stress and trauma differs such that girls tend to exhibit more passivity and emotional dependence, while boys are more comfortable exhibiting emotions that might displease others, including anger and aggression. Feminist scholars argue that to the extent that development depends on the social and cultural contexts in which boys and girls are socialized, girls are more likely to react to sexual abuse with internalizing behaviors, while boys are more likely to react with externalizing behaviors.

Prior to the last twenty years or so, most studies of sexual abuse focused almost exclusively on female samples, reflecting the public's concern for the safety of females and the fact that females were most often the victims of sexual abuse (West & Litt, 1998). More recently, studies have attempted to assess gender differences (or similarities) in the prevalence and consequences of sexual abuse. However, these studies are difficult to generalize due to their reliance on select samples, as opposed to community samples, of youth, including clinical samples (Brown et al., 2000; Meyerson et al., 2002), institutionalized and incarcerated samples (Dembo et al., 1987; Gover, 2004; Toray, Coughlin, Vuchinich, & Patricelli, 1991), homeless or runaway samples (Johnson et al., 2006; McCormack et al., 1986), convenience or phone survey samples (Boney-McCoy & Finkelhor, 1996; Finkelhor, Hotaling, Lewis, & Smith, 1990; Turner et al., 2006; Ullman & Filipas, 2005), and samples based on officially recorded abuse substantiated by an agency or the police, which usually involve only the most serious forms of abuse (Widom, 1989).

The relatively few studies that have been conducted using larger and more representative samples have produced mixed results (e.g., Ackard et al., 2001; Boden, Horwood, & Fergusson, 2007; Chandy, Blum, & Resnick, 1996; Fergusson, Boden, & Horwood, 2008; Martin et al., 2004; Neumark-Sztainer et al., 2000; Schraedley et al., 1999). Some studies, for example, have found that sexually abused females are more likely to engage in internalizing behaviors later in life and that sexually abused males are more likely to engage in externalizing behaviors (Chandy et al., 1996; see Hooper & Warwick, 2006, for a review), while other studies have found that male victims are more likely than female victims to abuse substances, perform poorly in school, to engage in delinquent activities and sexual risk

taking, and to behave aggressively (Chandy et al., 1996; Cutler & Nolen-Hoeksema, 1991; Martin et al., 2004; see Hooper & Warwick, 2006, for a review). Other studies have found that males and females exhibit both internalizing and externalizing behaviors following sexual abuse, although the nature and severity of the problems sometimes differ by gender. For example, studies have found differences in the types of delinquency engaged in by sexually abused males and females, with males tending to be involved in violent offenses and females tending to be involved in property, drug, and disorderly offenses (Chesney-Lind, 1989; Widom, 1989).

Findings regarding gender differences in internalizing behaviors are similarly mixed. Some studies find that sexually abused females experience more depression, anxiety, suicidal ideation, disordered eating, general distress, and other trauma-related symptoms than sexually abused males (Chandy et al., 1996; Cutler & Nolen-Hoeksema, 1991). Others find that sexually abused males engage in internalizing behaviors more so than sexually abused females (Martin et al., 2004; Neumark-Sztainer et al., 2000; Schraedley et al., 1999). Finally, some studies find no gender differences in responses to sexual abuse. Using data from the New Zealand Christchurch Health and Development Study, Fergusson et al. (Boden et al., 2007; Fergusson et al., 2008) found no significant gender differences in the impact of sexual abuse on either educational achievement or adjustment in early adulthood. In a study of incarcerated youth, Gover (2004) found that the association between sexual abuse and depression was similar for male and female victims. The same finding was reported by Garnefski and Arends (1998) and Ullman and Filipas (2005) using a community sample and college student sample, respectively. Boney-McCoy and Finkelhor (1996) found no gender differences in the relationship between sexual abuse and trauma-related symptoms. Hussey, Chang, and Kotch (2006), using data from the National Longitudinal Study of Adolescent Health (Add Health), examined the prevalence, risk factors, and health consequences for adolescents who experienced childhood sexual abuse, but no gender analyses were conducted beyond using gender as a control.

While a number of studies using larger and often nationally representative samples have been conducted, the findings have been mixed. Though some of this may be due to the different outcomes examined by various studies, some is also due to the way certain variables were measured. In the three larger studies previously mentioned that examined eating disorders (Ackard et al., 2001; Chandy et al., 1996; Neumark-Sztainer et al., 2000), all three had different findings. Ackard et al. (2001) found no gender differences in the effect of sexual abuse on eating disorders, but their sexual abuse question was very simple (have you ever been sexually abused?), and the only disordered eating behavior examined was bingeing/purging. Chandy et al. (1996) found that the relationship between sexual abuse and disordered eating was stronger in females than in males. They measured sexual abuse with a much more detailed prompt, and their measure of disordered eating contained multiple items concerning self-evaluation of weight, satisfaction with weight, and dieting. This study also examined only those respondents from a larger, nationally representative study that reported sexual abuse. Neumark-Sztainer et al. (2000) found that sexually abused boys were at greater risk for disordered eating than sexually abused girls. Their measure of sexual abuse was also a single question (have you ever been sexually abused?), and their measure of disordered eating contained only questions on purging, and taking diet pills, laxatives, or diuretics.

Of the studies mentioned above that examined depressed mood as the outcome, the findings were also quite mixed, but they did not appear to follow any pattern based on type of sample, statistical analyses used, or measurement of variables. Two studies with larger, more representative samples examined the influence of

sexual abuse on delinquency; both found gender differences, with sexually abused boys being more likely to engage in delinquency than sexually abused girls. Finally, the two studies listed above that examined anxiety as an outcome both found no gender differences in the impact of sexual abuse. In addition, differences in control variables may have had some impact on the mixed results found.

The mixed results reported in the literature on childhood sexual abuse may indicate that gender differences in impairments are outcome-specific. To advance theory and to improve intervention programs, research in this area must begin to examine more vigorously whether gender differences exist in the associations between sexual abuse and a range of possible impairments. Past research clearly indicates that sexual abuse is associated with numerous impairments later in life. Less clear is the extent to which specific impairments differ by gender. The current study attempts to address this issue.

In the current study, we examined multiple internalizing and externalizing impairments among a population-based sample of Icelandic males and females aged 16–20 who were and were not sexually abused as children. The outcomes examined include eating anxiety, depressed mood, general anxiety, violent behavior, and theft. This study fills gaps in the current literature in several ways. First, the study is quite large and nationally representative. While there are a few studies with these qualifications, there are not many, and the findings are mixed. Second, the current study examines multiple outcomes on the same group of individuals, separates depression and anxiety into two separate outcomes, and separates delinquency into minor (theft) and serious (violent) behavior. In addition, this study also controls for delinquent peer associations, which have been shown in criminological studies to have a very strong association with delinquency. Finally, though the sexual abuse measure used in the current study is based on a single prompt, it allows for the examination of multiple levels of abuse severity, a characteristic not found in most other studies involving nationally representative samples.

Method

Data

The data come from the Icelandic Centre for Social Research and Analysis, 2004 *Junior College Questionnaire*. The *Junior College Questionnaire* is a population-based survey administered to high school students in Iceland in 2004. Participants were 10,472 students aged 16–20 attending “secondary education” or junior college in Iceland, which begins at age 16, after compulsory education ends. There are 38 junior colleges in Iceland, all of which participated in the survey. The sample was highly representative of youth in Iceland because in 2004, 93% of 16–20-year-olds attended junior college; 80.1% of those selected for the survey actually participated. The survey contained 169 self-report items measuring the students’ education, family and social background, sexual experiences and abuse, anxiety, depression, anger, self-esteem, and offending (by self and by peers). It was conducted in cooperation with the Government Agency for Child Protection, the Ministry of Education, and the Public Health Institute of Iceland.

Students were asked by teachers to participate in the survey. Participants were assured that their answers would remain anonymous and confidential. Students completed the questionnaire during a scheduled class session, which lasted approximately 1 h. After completion, students sealed the questionnaire in blank envelopes. All questionnaires were completed on the same day.

Sample size and missing values

The original sample size of the survey was 11,031 respondents. After restricting the sample to those who were age 16 or older at

the time of the interview and who either were not abused or who experienced sexual abuse at age 15 or younger, the sample size was 8949 respondents. The variable with the greatest number of missing cases was parents' education (3.8% of our restricted sample), for which we used mean imputation. Other missing values were deleted list-wise reducing our sample to 8618, which is 96.3% of our restricted sample.

Measures

While comprehensive in scope, this survey of Icelandic youth consists largely of original items and scales developed by the Icelandic Centre for Social Research and Analysis. Thus, many of the items and scales used in the current study differ from those used in prior studies. This is particularly the case for our measures of eating anxiety, general anxiety, and depressed mood. Nonetheless, as is described below, with few exceptions (e.g., physical abuse), the measures used here possess a high degree of face validity and internal reliability with respect to the constructs they are intended to represent. Moreover, the outcome measures used in this study were selected because they enabled us to examine a range of impairments that may be associated with sexual abuse for male and female victims. The specific measures are as follows.

Sexual abuse

Respondents were given the following prompt prior to being asked specific questions about sexual abuse: "Sometimes people are persuaded, pressed, or forced to participate in sexual activities they cannot protect themselves from. The following questions are about such situations. Have you been exposed to any of the following against your will? If so, how old were you when it happened?" They then answered yes or no to the following statements: "somebody has touched your body, excluding genitals, in an indecent way," "somebody has touched your genitals," "somebody has persuaded, pressed, or forced you to touch his/her genitals," and "somebody has persuaded, pressed, or forced you to have sexual intercourse." To ensure that the sexual abuse measure pertained to the period *prior* to that of our outcome measures, we included only those acts that occurred prior to age 16. If respondents answered "no" to all four statements, they were coded as 0 (no sexual abuse); if they answered "yes" to any of the four statements, they were coded as 1 (sexually abused).

In supplemental analyses presented in the final section of the paper, we examined the effect of the type of sexual abuse experienced by coding three levels of sexual abuse severity from the questions above: *Level One*, the lowest level of severity, includes touching the respondent's body, excluding genitals, in an indecent way (subsequently referred to as "nongenital"). *Level Two* includes touching the respondent's genitals or persuading, pressing, or forcing the respondent to touch someone else's genitals (subsequently referred to as "genital"). *Level Three*, the most serious type of abuse measured here, includes having been persuaded, pressed, or forced into having sexual intercourse (subsequently referred to as "intercourse"). All of the sexual abuse items pertain to when the respondent was 15 years old or younger.

Eating anxiety

Items for the eating anxiety scale come from the Eating Disorders Inventory instrument developed by Garner, Olmstead, & Polivy (1983). Respondents were asked how often they feel the following statements applied to them: "I think about dieting," "I feel a lot of guilt after having eaten excessively," "the thought of gaining weight frightens me," "I exaggerate or fuss unnecessarily over my weight," "I am obsessed by the thought of being thinner," and "if my weight increases slightly, I worry that it will continue." Answers ranged

from 1 = "almost always" to 5 = "almost never." The answers were reverse coded and summed so that a high score indicates high eating anxiety. Due to the large range of the scale and small cell sizes for some of the values, the scale was divided into quintiles to create a recoded scale ranging from 0 to 4 (Alpha = .95).

General anxiety

Youth were asked how often they felt any of the following discomforts in the past week: "nervousness," "sudden fear for no apparent reason," and "tense," with answers ranging from 1 = "almost never" to 4 = "often." The answers were summed to create a scale ranging from 3 to 12 (Alpha = .77). In order to make this variable easier to interpret, 3 was subtracted from the score, allowing the scale's range to begin at 0 (ranging from 0 to 9).

Depressed mood

To measure depressed mood, respondents were asked how often they experienced any of the following discomforts in the past week: "you were sad or had little interest in doing things," "you had little appetite," "you felt lonely," "you cried easily or wanted to cry," "you had sleeping problems," "you felt sad or blue," "you were not excited in doing things," "you felt slow or had little energy," "the future seemed hopeless," and "you thought about committing suicide." The answers were summed; due to the large range of the scale and small cell sizes for some of the higher values, the scale was divided into equal sixths to create a recoded scale ranging from 0 to 5 (Alpha = .89).

Theft

Youth were asked how often (if ever) they had done any of the following during the last 12 months: "stolen something worth less than 5,000 Kronur (approx. \$72)" and "stolen something worth more than 5,000 Kronur (approx \$72)." The measures were each coded into a dichotomy and combined to form a single dichotomous measure of theft (Alpha = .62).

Violent behavior

Respondents were asked the following three questions regarding violent behavior: in the last 12 months have you "used physical violence in order to rob/steal?" "exerted physical violence?" or "been in a fight?" (Alpha = .66). The variable was coded "1" if respondents engaged in any of these behaviors.

Gender

The sample contains 3977 females (coded 0) and 4479 males (coded 1).

Control variables

Age, family structure, parents' education, socioeconomic status, parental attachment, peer delinquency, and physical abuse were included as control variables in this study. These variables were selected because they have been found to be associated with sexual abuse, or they have been found to be associated with the outcome variables analyzed here (e.g., general anxiety, eating anxiety, depressed mood, theft, and violence). Including physical abuse as a control in a study of sexual abuse is of particular importance. There are often interconnections among various types of victimization. In fact, Finkelhor et al. (2005) found that children and youth who experienced sexual victimization were particularly likely to be victims of assault. Failure to control for physical abuse would put us at risk for overestimating the impact of sexual abuse.

Family structure is a dichotomous measure of whether or not the respondent lived with both parents (coded 1, all others coded 0). Parents' education was calculated using the maximum level of education of the mother and father, ranging from 2 (completed

primary school or less) to 6 (completed a college or university degree). There were no measures of household income or receipt of public assistance for low-income families; as an additional proxy for socioeconomic status (SES), a variable asking the respondent to indicate how well off their family is in comparison to others was also included. Responses for this SES proxy varied from 1 = much better than others to 7 = much worse than others. Parental attachment was measured using the average of the following three survey questions (Alpha = .76): How easy or hard it would be for you to receive the following from your parents: “caring and warmth?” “discussions about personal affairs?” and “advice about studies?” (responses ranged from 1 = very difficult, 4 = very easy).

Peer delinquency was measured by averaging six survey questions. Respondents were asked how many of their friends do the following: “smoke cannabis,” “steal something worth less than 5000 Kronur” (approx. \$72), “steal something worth more than 5000 Kronur,” “break into cars or buildings in order to steal something,” “damage or break things that didn’t belong to them,” and “use physical violence against others” (Alpha = .85).

Physical abuse was measured using one survey question. Respondents were asked if they had ever been involved in physical violence at home. This question was coded into a dichotomous variable where “0” indicates the respondent was not involved in physical violence at home and “1” indicates that the respondent was involved in physical violence at home. While the authors recognize that this single item is not an ideal measure, it is the only measure available in the data. Future studies would benefit from including a measure of physical abuse that included multiple questions regarding the nature of the abuse experienced.

Statistical techniques

Two types of regression analyses were used in this study. For the dichotomous dependent variables (theft and violent behavior), logistic regression was used. For the categorical dependent variables (eating anxiety, general anxiety, and depressed mood), ordinal regression was used. Aside from the different types of regression, the steps in the analyses were the same. For each outcome, a regression model was run that included sexual abuse, male, an interaction term (sexual abuse by male), and the control variables. The interaction term allowed us to determine whether the impact of sexual abuse on each of the five outcome measures varied significantly by gender.

Results

Descriptive results

Descriptive statistics for the sample are shown in Table 1. The average age of respondents was 17.64 years, and a majority (approx. 70%) lived in a two-parent household. The mean level of parent’s education was between 4 and 5, which indicates that the parent with the highest level of completed education completed between “secondary school” (i.e., junior college) and “some college or university.” The mean level of SES, using our proxy of comparison to others’ financial status, is between 4 and 5, which indicates that the respondents reported feeling somewhere in between doing “similar to others” and “a little better than others” financially. Most respondents reported relatively few delinquent peers and a relatively high level of parental attachment. The percentage experiencing physical abuse was 6.1%.

There were five dependent variables analyzed in this study. Nearly 20% of the sample reported engaging in violent behavior, and nearly 20% reported engaging in theft. The mean level of eating anxiety was 2.97 (range 0–4). The mean level of general anxiety

was 2.51 (range 0–9), and the mean level of depressed mood was 1.50 (range 0–5). Of 8618 respondents, 11.7% reported some form of sexual abuse prior to the age of 16 ($N = 1008$). The correlation between physical and sexual abuse was $r = .13$ indicating some overlap between these victimization experiences.

Gender differences

As we know from our earlier literature review, females tend to report more sexual abuse than males. Table 1 shows the same pattern: 17.6% of females compared to 6.3% of males reported experiencing some form of sexual abuse. In analyses not shown, we found that sexually abused males reported a higher mean level of severity than females (1.54 versus 1.35, where 1 = somebody touched your body, excluding genitals, in an indecent way and 4 = somebody persuaded, pressed, or forced you to have sexual intercourse). While this difference appears small, a one-way ANOVA indicates it is statistically significant ($F = 15.14, p < .001$). We found a significant gender difference in the type of perpetrator (family member versus non-family member); 95.9% of sexually abused males reported that the sexual abuse perpetrator was a family member, compared to 86.5% of sexually abused females ($F = 145.62, p = .001$). Finally, while we were unable to measure the age of onset or the duration of sexual abuse, we were able to measure the number of times the respondent was abused as well as the number of different abusers a respondent reported having. Males reported a slightly higher incidence of abuse ($F = 3.83, p = .051$) though number of perpetrators reported by males did not differ from that of females ($F = .76, p = .382$).

Table 1 also shows that males and females differed significantly on all five outcome variables. Consistent with most literature on these subjects, males reported more externalizing behaviors (theft [$p < .001$] and violent behavior [$p < .001$]), while females reported more internalizing behaviors (eating anxiety [$p < .001$], general anxiety [$p < .001$], and depressed mood [$p < .001$]).

Regression analyses

Logistic and ordinal regression techniques were used to examine the association between sexual abuse and each outcome, and to determine whether the associations varied by gender. Table 2 presents findings for the three internalizing outcomes, eating anxiety, depressed mood, and general anxiety. As expected, teenagers who had been sexually abused as children were more likely to experience depressed mood ($b = .55, p < .001$), general anxiety ($b = .47, p < .001$), and eating anxiety ($b = .45, p < .001$). The interaction term between sexual abuse and gender was significant for depressed mood ($b = -.50, p < .001$) and general anxiety ($b = -.28, p = .031$). The effect of sexual abuse on depressed mood and general anxiety was greater for females; the effect of sexual abuse on eating anxiety did not vary significantly by gender ($b = .20, p = .169$). In a slopes test (not shown), we found that for males the associations between sexual abuse and subsequent depressed mood and general anxiety, while positive, were not significantly different from zero, indicating that males who were sexually abused as children did not experience higher rates of depressed mood or general anxiety than those who were not. For females, however, depressed mood and general anxiety were significantly greater for those who were sexually abused compared to those who were not.

In addition, the results show that older teenagers, those from families with a higher level of parent’s education, those with higher levels of parental attachment, those with delinquent peers, and those who experienced physical abuse were, with a few exceptions, significantly more likely to score high on the internalizing outcomes. The results for being in a two-parent family were mixed: teenagers from two-parent families were significantly less likely to experience

Table 1
Descriptive statistics.

Variables	Total sample (N = 8618)			Males (N = 4479)			Females (N = 3977)		
	Mean or %	SD	Range	Mean or %	SD	Range	Mean or %	SD	Range
Age	17.64	1.78	16–25	17.66	1.79	16–25	17.63	1.77	16–25
Two-parent family ^a	69.8%	–	0–1	71.1%	–	0–1	68.4%	–	0–1
Parent's education ^a	4.63	1.28	2–6	4.69	1.26	2–6	4.57	1.30	2–6
Socioeconomic status ^a	4.42	1.00	1–7	4.49	1.02	1–7	4.33	.96	1–7
Delinquent peers ^a	1.38	.50	1–5	1.50	.57	1–5	1.25	.39	1–5
Parental attachment ^a	3.45	.61	1–4	3.38	.63	1–4	3.53	.59	1–4
Physical abuse	6.1%	–	0–1	5.8%	–	0–1	6.5%	–	0–1
Sexual abuse ^a	11.7%	–	0–1	6.3%	–	0–1	17.6%	–	0–1
Level 1 abuse ^a	3.2%	–	0–1	1.0%	–	0–1	5.6%	–	0–1
Level 2 abuse ^a	5.6%	–	0–1	3.7%	–	0–1	7.6%	–	0–1
Level 3 abuse ^a	2.9%	–	0–1	1.6%	–	0–1	4.3%	–	0–1
Eating anxiety ^a	2.97	1.18	0–4	2.37	.86	0–4	3.52	1.20	0–4
General Anxiety ^a	2.51	2.23	0–9	2.07	2.02	0–9	2.98	2.34	0–9
Depressed mood ^a	1.50	1.10	0–5	1.35	1.03	0–5	1.66	1.14	0–5
Theft ^a	19.9%	–	0–1	26.8%	–	0–1	12.5%	–	0–1
Violent behavior ^a	19.8%	–	0–1	29.5%	–	0–1	9.4%	–	0–1

^a These variables differ significantly by gender.

eating anxiety, but there was no significant effect for depressed mood or general anxiety.

Findings for the two externalizing outcomes are shown in Table 3. As expected, male teenagers and those who had been sexually abused as children were more likely to engage in theft ($b = .41, p < .001$) and violence ($b = .62, p < .001$); the effect of CSA on theft and violence did not vary significantly by gender. In addition, younger teenagers, those with delinquent peers, and those who experienced physical abuse were significantly more likely to engage in both theft and violence. The results for being in a two-parent family were mixed, as were the results for parent's education and parental attachment: teenagers from two-parent families were significantly less likely to engage in violence, teenagers with lower parents' education were more likely to engage in violence, and teenagers with lower levels of parental attachment were more likely to engage in violence. There was no association between family structure, parents' education, or parental attachment and theft.¹

Discussion

The current study attempted to improve upon the limitations of previous studies of sexual abuse by (1) examining a wide range of associated impairments among (2) a large, representative sample of Icelandic youth. Using these previously unexamined data, we found that 11.5% of Icelandic youth were sexually abused prior to the age of 16, including 6.2% of males and 17.3% of females, consistent with estimates from prior national studies that have been done in the U.S and U.K. The greater likelihood of sexual abuse among females than males may be due to the fact that most sexual abuse perpetrators are heterosexual men (Department of Justice, Bureau of Justice Statistics, 1996; Finkelhor, 1991; Jenny, Roesler, & Poyer, 1994). Therefore, all things equal, young females are more likely than young males to become the target of sexual abuse.

We found no gender differences in the effect of sexual abuse on either theft or violent behavior. This finding is inconsistent with prior research showing that sexually abused males are more likely

than sexually abused females to engage in externalizing behaviors (e.g., Chandy et al., 1996; Hooper & Warwick, 2006). Although males are, in general, more likely than females to engage in these forms of externalizing behavior, especially violence, our data indicate they are no more likely than females to engage in these behaviors following sexual abuse. In contrast, we found significant gender differences in the association between sexual abuse and two of the three internalizing outcomes we examined. The associations between sexual abuse and subsequent depressed mood and general anxiety, but not eating anxiety, were significantly stronger for females. This is consistent with prior studies that have shown that female victims of sexual abuse are more likely than male victims to exhibit internalizing behaviors following sexual abuse (Chandy et al., 1996; Gover, 2004; Hooper & Warwick, 2006).

To examine whether our findings were sensitive to the age cut-off used in our measure of sexual abuse, we conducted additional analyses (not shown) in which the sexual abuse measure was limited to those who experienced abuse at age 12 or younger (instead of 15 or younger as described above). Results of these additional analyses were similar to what we reported above, with the following exceptions: the interaction term was not significant for depressed mood or general anxiety but was for theft ($p < .05$). These analyses are not shown because the small cell sizes (including some less than 15) that resulted from limiting the sexual abuse measure to those 12 and under. Nonetheless, because we observed variation in our results after adjusting the age cut-off for sexual abuse, future research should pay attention to age at which sexual abuse occurs. Perhaps this might help to reconcile the inconsistent findings in prior research on gender differences in the impairments associated with sexual abuse.

Because our sexual abuse measure included three types of abuse of varying severity, we conducted additional analyses to examine the impairments associated with each type of sexual abuse separately. We found (1) that the association between sexual abuse and depressed mood was stronger for females than males for the two most severe levels of abuse (genital and intercourse); (2) that the association between sexual abuse and eating anxiety was stronger for females than males only for the middle level of severity (genital); (3) that the association between sexual abuse and general anxiety was stronger for females than males for the highest level of severity (intercourse); and (4) that all three levels of sexual abuse were significantly and positively associated with theft and violent behavior and that these associations were of similar magnitudes for

¹ As one of the anonymous reviewers pointed out, childhood sexual abuse may be associated with subsequent impairment because of its prior association with parental attachment and peer delinquency. To assess this possibility, we re-estimated each of our models without parental attachment and peer delinquency. The results remained the same.

Table 2
Regression coefficients for internalizing outcomes.

Variable	Depressed mood		General anxiety		Eating anxiety	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
Male	-.72*** (.04)	-.68*** (.05)	-.83*** (.041)	-.80*** (.04)	2.17*** (.05)	2.17*** (.05)
Sexual abuse	.55*** (.06)	.69*** (.08)	.47*** (.061)	.56*** (.07)	.45*** (.07)	.44*** (.07)
Sexual abuse × male	–	-.50*** (.14)	–	-.28* (.13)	–	.20 (.15)
Age	.04*** (.01)	.04*** (.01)	.03** (.01)	.03** (.01)	-.04*** (.01)	-.04*** (.01)
Two-parent family	-.05 (.05)	-.05 (.05)	-.02 (.04)	-.02 (.04)	-.15 (.05)	-.15** (.05)
Parent's education	.08*** (.02)	.08*** (.02)	.08*** (.02)	.08*** (.02)	-.03 (.02)	-.03 (.02)
Socioeconomic status proxy	-.17*** (.02)	.17*** (.02)	-.06** (.02)	.06** (.02)	-.04 (.02)	-.04 (.02)
Parental attachment	-.63*** (.04)	-.63*** (.04)	-.38*** (.03)	-.39*** (.03)	.23*** (.04)	.23*** (.04)
Peer delinquency	.54*** (.04)	.55*** (.04)	.37*** (.04)	.38*** (.04)	-.32*** (.05)	-.32*** (.05)
Physical abuse	.47*** (.09)	.46*** (.09)	.36*** (.08)	.36*** (.08)	.03 (.09)	.03 (.09)

* $p < .05$, ** $p < .01$, *** $p < .001$.

both genders. These supplementary results suggest that the severity of abuse may matter more for females than for males. However, these results must be viewed with caution in light of the fact that the number of cases available for analyzing the various levels of sexual abuse was quite small.

Overall, our results suggest that there is some validity to the argument that gender-specific theories are needed in order to account for the impairments associated with sexual abuse, particularly with respect to internalizing forms of emotional distress, such as depressed mood and general anxiety. At the same time we found no evidence of gender differences in the associations between sexual abuse and two common forms of externalizing behaviors, theft and violence. These findings suggest that to prevent delinquent outcomes it may be sufficient to implement a single intervention program for both genders. On the other hand, it may be that although rates of theft, violence, and eating anxiety following sexual abuse were the same for male and females, the mechanisms involved in producing these impairments differed by gender. Unfortunately, our data do not allow us to address this issue. Thus, a better understanding of potential gender differences in the mechanisms that link sexual abuse to subsequent impairments must await further research.

While our study improved upon prior research by using a large and representative national sample and by examining a wide range of impairments that might be associated with sexual abuse, several caveats must be mentioned. First, the study was based on cross-sectional data, so conclusions about causality cannot be made. Although we addressed this limitation by restricting sexual abuse experiences to ages 15 and younger and the sample to ages 16 and older, this does not eliminate the problems completely because the

measures used here were retrospective in nature and may be influenced by the respondents' current interpretation of their life situations and prior experiences. Clearly, a longitudinal study spanning childhood, adolescence, and young adulthood would help us to further understand the consequences of sexual abuse while avoiding the problem of relying on retrospective recall of childhood experiences.

Second, while we controlled for childhood physical abuse, we were unable to provide a detailed analysis of this variable. The measure of sexual abuse available in these data is much more detailed (and therefore stronger) than the measure of physical abuse. Additionally, we were unable to measure childhood neglect and so could not compare its effects to childhood sexual or physical abuse. This is problematic given that there is some discussion in the literature about not just which form of childhood experience (neglect, physical abuse, or sexual abuse) is responsible for later problems (see Spohn, 2000; Zingraff, Leiter, Myers, & Johnsen, 1993), but more importantly the extent of the association across these multiple types of abuse. This is difficult to ascertain in this sample given the lack of, or poor quality of, survey items examining other forms of maltreatment that respondents may have been experiencing simultaneously with sexual abuse. A final aspect of abuse that we were not able to examine is emotional abuse. Though not physically invasive, emotional abuse is nonetheless harmful and can be as damaging as physical or sexual abuse in terms of later life impairments. Future studies should take into account the full range of negative experiences a child may face in the home in order to fully understand both the individual and combined impact of these events (including different kinds abuse and neglect) on later life problems.

Table 3
Regression coefficients for externalizing outcomes.

Variable	Theft		Violent behavior	
	Model 1	Model 2	Model 1	Model 2
	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)	<i>b</i> (s.e.)
Male	.66*** (.07)	.65*** (.07)	1.30*** (.07)	1.30*** (.07)
Sexual abuse	.41*** (.09)	.40*** (.09)	.62*** (.09)	.61*** (.09)
Sexual abuse × male	–	-.25 (.18)	–	-.08 (.19)
Age	-.09*** (.02)	-.09*** (.02)	-.06*** (.02)	-.05** (.02)
Two-parent family	-.001 (.07)	-.00 (.07)	-.20** (.07)	-.20** (.07)
Parent's education	.01 (.02)	.01 (.02)	-.06* (.03)	-.06** (.03)
Socioeconomic status proxy	-.02 (.03)	-.02 (.03)	.02 (.03)	.02 (.03)
Parental attachment	-.10* (.05)	-.09 (.05)	-.12* (.05)	-.10* (.05)
Peer delinquency	1.62*** (.06)	1.61*** (.06)	1.38*** (.06)	1.38*** (.06)
Physical abuse	.43*** (.12)	.43*** (.12)	1.03*** (.12)	1.03*** (.12)
Constant	-2.32*** (.40)	-2.38*** (.40)	-2.70*** (.40)	-2.76*** (.40)

* $p < .05$, ** $p < .01$, *** $p < .001$.

Third, as we mentioned previously, 93% of all 16–20-year-olds in Iceland attended school in 2004 and were therefore part of the sampling frame for this study. However, because the impairments associated with sexual abuse may be among the reasons that some youth were not enrolled in these institutions, it is possible that this study underestimated both the prevalence of sexual abuse as well as the degree to which it is associated with later life impairments. It is also possible that students those enrolled in secondary education who did not participate in the survey (approximately 20%) may have contributed to this underestimation as well. Research based on both in- and out-of-school youth would be necessary to produce findings that generalize to all Icelandic youth.

Overall, our results suggest that gender differences in the impairments associated with sexual abuse may depend on the particular outcome examined. While there was no gender difference in the association between sexual abuse and either of our externalizing outcome variables (e.g., theft or violence), there were significant gender differences with regard to two of the three internalizing behaviors studied (e.g., eating anxiety and depressed mood). Future research should differentiate between types of outcomes that may be associated with sexual abuse for males and females. Indeed, not doing so may be part of the reason that past research has produced mixed results. If, as suggested above, females tend to respond to negative experiences with internalizing behaviors, it makes sense that sexual abuse would have a greater impact on their depressed mood and eating anxiety compared to males. Nonetheless, more research is needed to substantiate this claim.

Currently, the number of studies of childhood sexual abuse that have used large, nationally representative samples is small, as is the number that has examined gender differences using multiple outcomes. Nonetheless, knowing whether or not sexual abuse affects males and females differently has important theoretical implications, as well as policy implications regarding interventions. If we wish to be able to assist children in dealing with the negative consequences of sexual abuse, we must have a better understanding of how the process works, for both males and females, and whether that process is similar or different for them. This study takes an important step toward providing a greater understanding of the impairments associated with childhood sexual abuse that might be of use in the development of more effective treatments for victims.

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References

- Ackard, D. M., Neumark-Sztainer, D., Hannan, P. J., French, S., & Story, M. (2001). Binge and purge behavior among adolescents: associations with sexual and physical abuse in a nationally representative sample: the commonwealth fund survey. *Child Abuse and Neglect*, 6, 771–785.
- Boden, J. M., Horwood, L. J., & Fergusson, D. M. (2007). Exposure to childhood sexual and physical abuse and subsequent educational achievement outcomes. *Child Abuse and Neglect*, 31(10), 1101–1114.
- Boney-McCoy, S., & Finkelhor, D. (1996). Is youth victimization related to trauma symptoms and depression after controlling for prior symptoms and family relationships? A longitudinal, prospective study. *Journal of Consulting and Clinical Psychology*, 64, 1406–1416.
- Brown, L. K., Lourie, K. J., Zlotnic, C., & Cohn, J. (2000). Impact of sexual abuse on the HIV-risk-related behavior of adolescents in intensive psychiatric treatment. *The American Journal of Psychiatry*, 157, 1413–1415.
- Chandy, J. M., Blum, R. W., & Resnick, M. D. (1996). Gender-specific outcomes for sexually abused adolescents. *Child Abuse and Neglect*, 20, 1219–1231.
- Chesney-Lind, M. (1986). Women and crime: the female offender. *Signs*, 12, 78–101.
- Chesney-Lind, M. (1989). Girl's crime and woman's place: toward a feminist model of female delinquency. *Crime and Delinquency*, 35, 5–29.
- Cutler, S. E., & Nolen-Hoeksema, S. (1991). Accounting for sex differences in depression through female victimization: childhood sexual abuse. *Sex Roles*, 24, 425–438.
- DeJong, A. R., Hervada, A. R., & Emmett, G. A. (1983). Epidemiologic variations in childhood sexual abuse. *Childhood Abuse and Neglect*, 7(2), 155–162.
- Dembo, R., Dertke, M., La Voie, L., Borders, S., Washburn, M., & Schmeidler, J. (1987). Physical abuse, sexual victimization, and illicit drug use: a structural analysis among high risk adolescents. *Journal of Adolescence*, 10, 13–34.
- Department of Justice. Bureau of Justice Statistics. (1996). Child victimizers: violent offenders and their victims. Retrieved February 6, 2008, from: <http://www.ojp.gov/bjs/pub/pdf/cvvoatv.pdf>.
- Fergusson, D. M., Boden, J. M., & Horwood, L. J. (2008). Exposure to childhood sexual and physical abuse and adjustment in early adulthood. *Child Abuse and Neglect*, 32(6), 607–619.
- Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: Free Press.
- Finkelhor, D. (1991). Child sexual abuse. In M. L. Rosenberg, & M. A. Fenley (Eds.), *Violence in America: A public health approach*. New York: Oxford University Press.
- Finkelhor, D. (1995). The victimization of children: a developmental perspective. *American Journal of Orthopsychiatry*, 65, 177–193.
- Finkelhor, D., & Baron, L. (1986). Risk factors for child sexual abuse. *Journal of Interpersonal Violence*, 1(1), 43–71.
- Finkelhor, D., Hotaling, G., Lewis, I. A., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: prevalence, characteristics, and risk factors. *Child Abuse and Neglect*, 14, 19–28.
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. L. (2005). The victimization of children and youth: a comprehensive, national survey. *Child Maltreatment*, 10(1), 5–25.
- Garnefski, N., & Arends, E. (1998). Sexual abuse and adolescent maladjustment: differences between male and female victims. *Journal of Adolescence*, 21(1), 99–107.
- Garner, D. M., Olmstead, M. P., & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia nervosa and bulimia. *International Journal of Eating Disorders*, 2, 15–34.
- Gover, A. R. (2004). Childhood sexual abuse, gender, and depression among incarcerated youth. *International Journal of Offender Therapy and Comparative Criminology*, 48(6), 683–696.
- Hooper, C., & Warwick, I. (2006). Gender and the politics of service provision for adults with a history of childhood sexual abuse. *Critical Social Policy*, 26(2), 467–479.
- Hussey, J. M., Chang, J. J., & Kotch, J. B. (2006). Child maltreatment in the United States: Prevalence, risk factors, and adolescent health consequences. *Pediatrics*, 118(3), 933–942.
- Jenny, C., Roesler, T. A., & Poyer, K. L. (1994). Are children at risk for sexual abuse by homosexuals? *Pediatrics*, 94(1), 41–44.
- Johnson, R. J., Rew, L., & Kouzekanani, K. (2006). Gender differences in victimized homeless adolescents. *Adolescence*, 41(161), 39–53.
- Kendler, K. S., Bulik, C. M., Silberg, J., Hettena, J. M., Myers, J., & Prescott, C. A. (2000). Childhood sexual abuse and adult psychiatric and substance use disorders in women. *Archives of General Psychiatry*, 57, 953–959.
- McCormack, A., Janus, M. D., & Burgess, A. W. (1986). Runaway youths and sexual victimization: gender differences in an adolescent runaway population. *Child Abuse and Neglect*, 10, 387–395.
- Martin, G., Bergen, H. A., Richardson, A. S., Roeger, L., & Allison, S. (2004). Sexual abuse and suicidality: gender differences in a large community sample of adolescents. *Child Abuse and Neglect*, 28, 491–503.
- Meyerson, L. A., Long, P. J., Miranda, R., Jr., & Marx, B. P. (2002). The influence of childhood sexual abuse, physical abuse, family environment, and gender on the psychological adjustment of adolescents. *Child Abuse and Neglect*, 26, 387–405.
- Neumark-Sztainer, D., Story, M., Hannan, P. J., Beuhring, T., & Resnick, M. D. (2000). Disordered eating among adolescents: associations with sexual/physical abuse and other familial/psychosocial factors. *International Journal of Eating Disorders*, 28(3), 249–258.
- Schraedley, P. K., Gotlib, I. H., & Hayward, C. (1999). Gender differences in correlates of depressive symptoms in adolescents. *Journal of Adolescent Health*, 25, 98–108.
- Slater, J. M., Guthrie, B. J., & Boyd, C. J. (2001). A feminist theoretical approach to understanding health of adolescent females. *Journal of Adolescent Health*, 28(6), 443–449.
- Spohn, R. E. (2000). Gender differences in the effect of child maltreatment on criminal activity over the life course. In G. L. Fox, & M. L. Benson (Eds.), *Families, crime and criminal justice*, Vol. 2 (pp. 207–231). New York: Elsevier Science.
- Toray, T., Coughlin, C., Vuchinich, S., & Patricelli, P. (1991). Gender differences associated with adolescent substance abuse: comparisons and implications for treatment. *Family Relations*, 40, 338–344.
- Trickett, P. K., & McBride-Chang, C. (1995). The developmental impact of different forms of child abuse and neglect. *Developmental Review*, 15, 311–337.
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social Science & Medicine*, 62, 13–27.
- Ullman, S. E., & Filipas, H. H. (2005). Gender differences in social reactions to abuse disclosures, post-abuse coping, and PTSD of child sexual abuse survivors. *Child Abuse and Neglect*, 29, 767–782.
- West, D. J., & Litt, D. (1998). Boys and sexual abuse: an English opinion. *Archives of Sexual Behavior*, 27(6), 539–559.
- Widom, C. (1989). Child abuse, neglect and violent criminal behavior. *Criminology*, 27, 251–271.
- Zingraff, M. T., Leiter, J., Myers, K. A., & Johnsen, M. C. (1993). Child maltreatment and youthful problem behavior. *Criminology*, 31(2), 173–202.